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ABSTRACT

One in a series on southwestern states, this report deals with the underrepresentation of Hispanics and other racial and ethnic minorities in higher education and provides specific information concerning Colorado's population. Written for educational policy makers, the report focuses on the implications of the fact that the greatest population growth in the next 20 years will take place among minority populations, whose rates of postsecondary educational attainment and socioeconomic status have been historically low. Information is presented in graphic and narrative form for 10 specific areas related to population growth, educational attainment, and family income. Exhibit 1 is concerned with population growth from 1960 to 1980 and projections for 2000. Exhibits 2 and 3 look at population by racial and ethnic origin. Exhibits 4 and 5 examine the educational attainment of persons aged 25 and over and the persistence of White, Hispanic, and Black high school students. Exhibits 6 and 7 illustrate the relationships among race and/or ethnicity, family income, and college attendance. Exhibit 8 displays the composition of postsecondary enrollments by race and ethnicity compared with each group's representation in the college-age population. Exhibits 9 and 10 show postsecondary degrees earned by race/ethnic group. (JHZ)

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Minorities in Higher Education:

The Changing Southwest

Colorado

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Western Interstate Commission for Higher Education

The College Board

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Minorities in Higher Education: The Changing Southwest

Colorado

A report prepared by the WICHE Information Clearinghouse in cooperation with the Western Regional Office of the College Board and with the support of the Atlantic Richfield Foundation

Geoffrey Dolman, Jr.
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Western Interstate Commission for Higher Education WICHE
The College Board

WICHE

WICHE, the Western Interstate Commission for Higher Education, is a nonprofit regional organization. It helps the thirteen member states to work together to provide high-quality, cost-effective programs to meet the education and manpower needs of the West. Member states are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. Through its Information Clearinghouse, WICHE provides information to assist higher education and governmental policy makers in the West.

This series of reports includes the following publications:

Minorities in Higher Education: The Changing Southwest (Arizona), publication no. 2A134a

Minorities in Higher Education: The Changing Southwest (California), publication no. 2A134b

Minorities in Higher Education: The Changing Southwest (Colorado), publication no. 2A134c

Minorities in Higher Education: The Changing Southwest (New Mexico), publication no. 2A134d

Minorities in Higher Education: The Changing Southwest (Texas), publication no. 2A134e

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Foreword

Sometimes we may become aware of societal trends without recognizing their potential effects on our social institutions. At other times, we may fail to respond adequately to social changes, even though we are aware that they are taking place. Among the virtues of our society are both the tendency toward self-correction--to make adjustments in our social institutions so that they function effectively--and the tendency toward making adjustments that anticipate needed changes and that, in a sense, preempt the need for self-correction.

As data in this and companion reports show, the current levels of education and income achieved by racial and ethnic minorities fall below that of Whites. This imbalance in economic and educational attainment, plus the rapid growth in the population of racial and ethnic minority groups, raises important issues for education and government policy makers in each state. It is the intent of this report to help focus the discussion on these issues and to encourage appropriate responses.

WICHE is grateful to the organizations and individuals who have worked with us on this important project. The College Board cosponsored the study and provided assistance and advice at several stages. The Atlantic Richfield Foundation provided additional financial support. A regional advisory committee, whose members are listed on the following page, provided valuable assistance in preparing these reports and helped develop a strategy for disseminating the results of the study.

August 1984

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Introduction

This series of state reports is intended to highlight the implications for educational planning of the changing demography of the Southwest. This project is the outgrowth of an earlier report, which was prepared to provide background data for a regional higher education conference on minority access and retention in higher education (Kaufman et al., 1983).

The decision to concentrate on minorities in higher education in the southwestern states follows from several conclusions that have been well documented.

- Certain racial and ethnic minorities have been underrepresented in higher education relative to nonminorities. This is especially true of Hispanic students, who are well represented, proportionally and numerically, in the population of these states.

- These minorities are even less well represented among college and professional school graduates.

- Increases in the proportion of racial and ethnic minorities among successive age cohorts present a challenge to educators and policy makers concerned with reversing these patterns of underrepresentation.

The reports focus on each of five southwestern states (Arizona, California, Colorado, New Mexico, and Texas) individually in order to call attention to the most important findings in each state.

As college-age populations in these five southwestern states grow in terms of both the numbers and percentages of ethnic minority individuals, policy makers will be faced with a number of serious educational and political questions. For example:

- Are current approaches to provision of educational opportunity--for all seeking it, regardless of ethnic background--sufficient, now and for the future?

- What are the implications for higher education and for institutions' program and resource "mix" of the growing minority share of the college-age population and the simultaneous decline (in some states) of the proportion of Whites in the same age groups?

- What are the implications of the growth of these minority populations for the economies of the states and their supplies of highly trained manpower, given the current distribution of minority students throughout the educational system (by institutional level and type, for example)?

- What are the implications for the higher education institutions of the current pattern of distribution of minority students, given the changes in the composition of the college-age group?

- If the educational patterns of minority students remain unchanged as their numbers grow, what are the possible social and political consequences?

These questions are meant only to suggest the seriousness and complexity of policy issues that need attention. The hope of the organizations publishing the report is that its contents will be useful as these challenging questions are addressed.

Definitions

The information in these reports comes primarily from two sources: the 1980 census of the population and related surveys by the United States Bureau of the Census provided population and demographic data, and the Higher Education General Information Survey (HEGIS) conducted by the National Center for Education Statistics (NCES) provided education data. Reference to these two sources ensures that there will be comparability in the data presented across states and that other users will have access to the same data sources.

Caution must be used when comparing the two data bases, however, because each source defines racial and ethnic groups differently, with particular impact on the "Hispanic" population group. The HEGIS format designates five racial or ethnic groups: American Indian, Black, Asian, Hispanic, and White. The Census Bureau uses the racial designations American Indian, Black, Asian, Other, and White, plus a further designation "Persons of Spanish Origin" and "Persons not of Spanish Origin," stating that persons of Spanish origin may be of any race. In this report, the Census Bureau data have been reconciled with the HEGIS data format, resulting in the following comparable groups:

HEGIS	CENSUS
American Indian	American Indians, Eskimos, and Aleuts whether of Spanish origin or not
Black	Blacks not of Spanish origin
Asian	Asian and Pacific Islanders whether of Spanish origin or not
Hispanic	Persons of Spanish origin, regardless of race
White	White, not of Spanish origin
Residual	Total population minus the above (also Other races not of Spanish origin)

While these breakdowns do not avoid all problems of comparability, they appear to work well for the purposes of this report. To keep the terminology short, in all cases Black and White refer to Black not-Hispanic and White not-Hispanic. Exhibits derived from census data refer to the category "Spanish origin," while exhibits derived from HEGIS data use the term "Hispanic" to identify essentially the same group.

It further must be recognized that the terms "Spanish origin" and "Hispanic" aggregate into one group several ethnic groups, e.g., Central American immigrants, Latinos, Mexican Americans, and others, which may vary from state to state. Each of these groups has its own demographic and cultural characteristics. Policy makers may wish to be aware of these different characteristics and of their implications for higher education.

The most recent and reliable data available were used in this report. In some cases more recent data were available, but older information was used because it was comparable with the data for earlier years whereas the newer data were not. Where the racial and ethnic composition of the college-age population is compared with the composition of the student population and the distribution of degrees among racial and ethnic groups (Exhibits 8A-8E and 9A-9E), HEGIS data from 1980 were used for the education information in order to compare them with census data from the same year.

Summary

- Colorado's population is projected to be between 4 million and 4.6 million by the year 2000, up from 2.9 million in 1980, a twenty-year growth rate of between 38 and 49 percent. (See Exhibit 1.)

- Two-thirds of the population growth from 1970 to 1980 can be accounted for by in-migration, which is projected to remain high.

- People of Spanish origin accounted for 11.8 percent of the total population of Colorado in 1980, but they accounted for nearly 18 percent of the 0-4 age group. (See Exhibits 2 and 3.)

- By 2000, nearly one-quarter of the age 0-4 population is projected to be of Spanish origin. (See Exhibit 3.)

- The other minority groups in Colorado are smaller. Blacks represented 3.5 percent of the total population in 1980, American Indians 0.6 percent, Asians 1.0 percent, and all others 0.5 percent. However, the other minority populations generally show growth patterns similar to that of the Spanish-origin population. (See Exhibit 3.)

- Although Colorado has the highest proportion of people aged 25 and older with college degrees, Whites far exceed minority groups in postsecondary educational attainment. (See Exhibit 4.)

- Data suggest that Hispanics tend to have higher high school dropout rates than Blacks or Whites and tend to leave school earlier. For example, the Hispanic enrollment in twelfth grade in fall 1982 was only 72 percent the size of Hispanic enrollment in ninth grade three years earlier, compared with 91 and 89 percent respectively for Black and White enrollments. (See Exhibit 5.)

- Statistics from Colorado appear to be similar to nationwide figures that show 83 percent of White students completing high school over the period from 1973 to 1979 compared with 72 percent of Black students and 55 percent of Hispanics. (See narrative to Exhibit 5.)

- National data indicate that smaller percentages of students from low-income families enroll in postsecondary education than students from medium- and high-income families. In Colorado, relatively high percentages of Spanish-origin, Black, and American Indian families earned less than $15,000 in 1979. (See Exhibits 6 and 7.)

- Present enrollment and earned degree patterns show serious underrepresentation (relative to their proportions in the college-age population--aged 20-29) of some minority groups in baccalaureate, master's, doctoral, and first professional degree programs. (See Exhibits 8A-8E and 9A-9E.)

- The numbers of associate, bachelor's, master's, and doctoral degrees awarded to Hispanic students have dropped since 1977. Blacks have earned fewer associate and doctoral degrees since 1977. (See Exhibit 10.)

- In summary, the greatest population growth in the next twenty years will take place among the minority populations, whose rates of postsecondary educational attainment and socioeconomic status have been low historically.

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Exhibit 1
Population Growth, 1960 to 1980, and Three Projections, 1990 to 2000

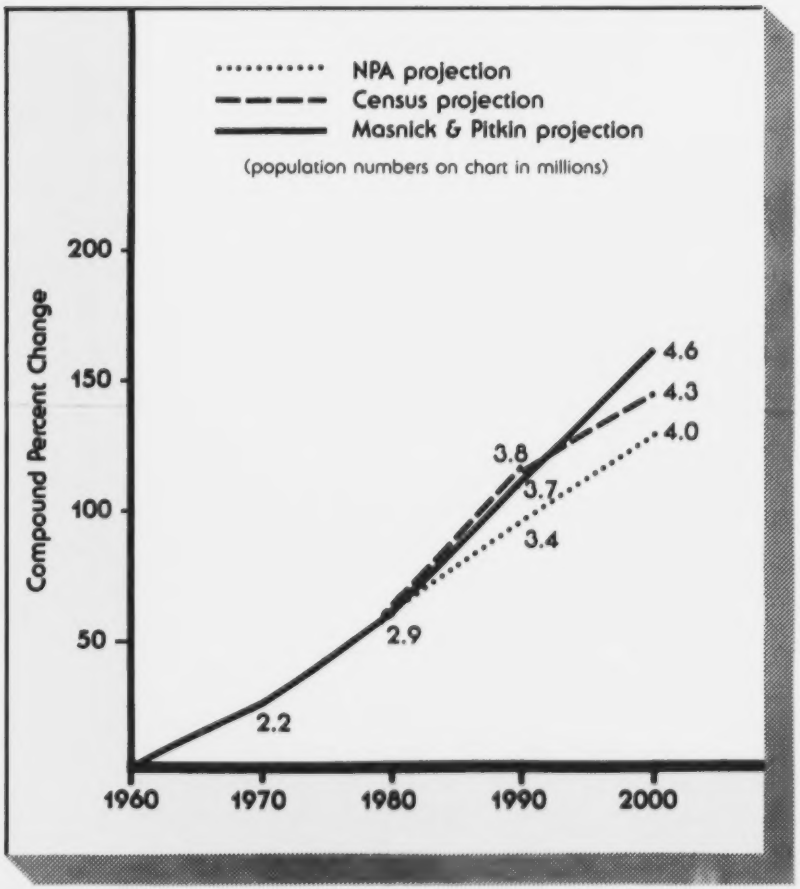
This exhibit shows the actual percentage growth in Colorado's population from 1960 to 1980. The dotted, dashed, and solid lines represent three different population projections for 1990 and 2000. These projections are based on mathematical calculations of trends evident today. They do not take into account economic or social factors that may cause the growth rate to accelerate or to slow.

- Colorado's population is projected to reach 4 million to 4.6 million by the year 2000, up from 2.9 million in 1980. The growth from 1980 to 1990 is estimated to be approximately 20 to 30 percent, and estimates of the overall change from 1980 to 2000 range from 38 to 59 percent.

- Both the Bureau of the Census and the National Planning Association project that Colorado will have the seventh largest growth rate in the 1980s (Robey and Russell, 1983).

- Two-thirds of the population growth from 1970 to 1980 can be attributed to in-migration, and the other one-third to natural growth (Masnick and Pitkin, 1982). Many of the people migrating to Colorado are young adults, who have attained or are approaching those years in which they will be starting families.

Exhibit 1
Population Growth, 1960 to 1980, and Three Projections, 1990 to 2000



Sources: Robey and Russell, 1983; U.S. Bureau of the Census, 1970 and 1980; Masnick and Pitkin, 1982.

Note: The Masnick and Pitkin projections are plotted as found in their report. Projections for 2000 from the National Planning Association and the Bureau of the Census are estimates calculated by regression analysis using actual population figures from the 1960, 1970, and 1980 censuses and the 1990 projections.

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Exhibit 2
Population by Race and Spanish Origin, 1980

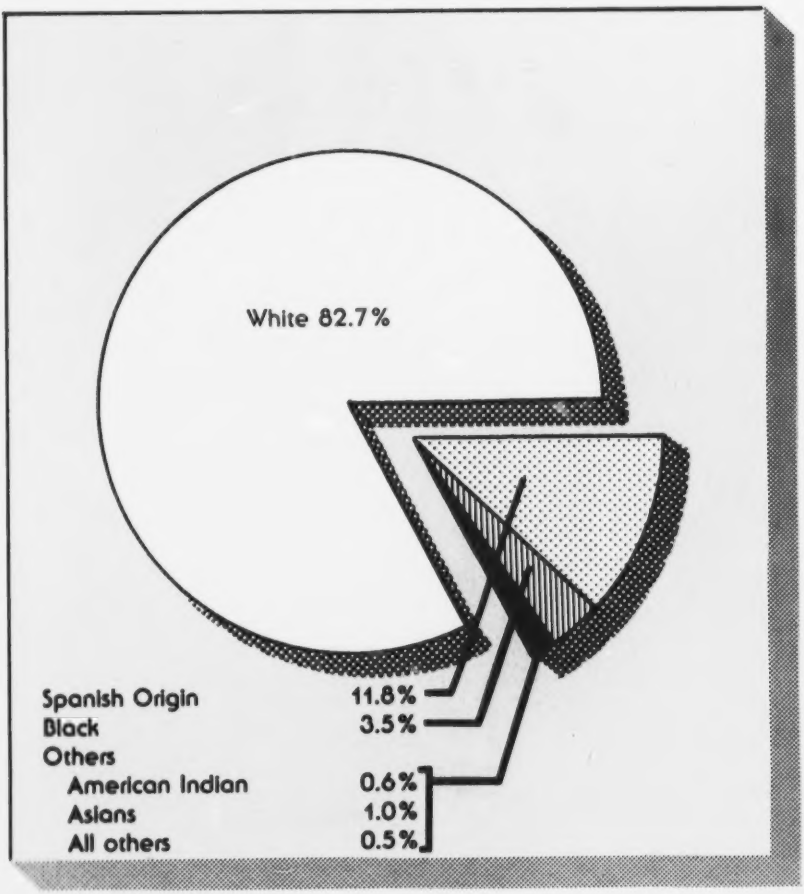
Exhibit 2 presents the proportions of racial and ethnic groups in the 1980 population in Colorado. Since the data collected on race and Spanish origin in 1970 and 1980 are not comparable, it is not possible to make an accurate comparison between the two censuses.

- Colorado's largest minority group is the Spanish-origin population. In size of total population, the state ranks 28th, but its Spanish-origin population is the ninth largest among the United States. Nearly 12 percent of the population considers itself to be of Spanish origin, which is the fifth highest percentage in the nation. (American Demographics, 1983).

- Denver had the seventeenth largest metropolitan Spanish-origin population in the country in 1980, with more than 164,000. Pueblo ranked forty-ninth with nearly 42,000. In terms of the percentage of Spanish-origin population, Pueblo ranked tenth with 33 percent, Greeley twenty-ninth with 17 percent, and Denver forty-first with 11.5 percent (American Demographics, 1983).

- In comparison with the Spanish-origin population, other minority groups in Colorado are small: Blacks comprise 3.5 percent of Colorado's population, American Indians 0.6 percent, Asians 1.0 percent, all others 0.5 percent (Kaufman et al., 1983, Tables 21 and 23).

Exhibit 2
Population by Race and Spanish Origin, 1980



Source: Kaufman et al., 1983, Table 21 and 23

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Exhibit 3
School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)

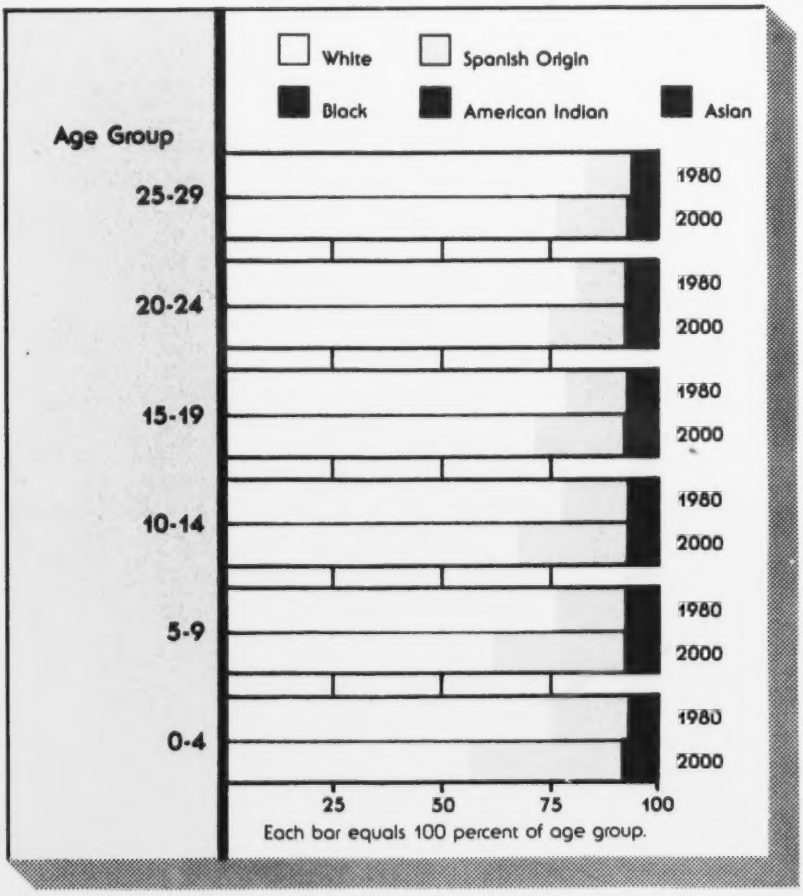
This exhibit shows the distribution of people of school age by race and Spanish origin for 1980 and a projection for the year 2000. The projection is based on a regression analysis of age cohort groups from the 1980 census.

- Exhibit 3 shows that the Spanish-origin population tends to be highly concentrated in the younger age groups. Although people of Spanish origin constituted 11.8 percent of the total population of Colorado in 1980, they accounted for 18, 17, and 16 percent respectively of the three youngest age groups.

- By the year 2000, children of Spanish origin are projected to account for 24.5, 23, and 21.5 percent respectively of the three youngest age groups.

- While the numbers of Black, Asian, and American Indian children will not be as large as the Spanish-origin group, the percentages of racial minority children in the youngest age groups are expected to rise steadily.

Exhibit 3
School and College-Age Population by Race and Spanish Origin, 1980 (Actual) and 2000 (Projected)



Source: Kaufman et al., 1983, Tables 20 and 22

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Exhibit 4
Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980

Exhibit 4 shows the proportions of the population aged 25 and over that have completed various levels of education. As the levels of educational attainment rise, the proportions of the population reaching those levels decrease. The differences in attainment among racial and ethnic groups are striking. It must be emphasized that school attainment of Colorado adults in 1980 does not necessarily reflect what is taking place among the present generation of students in school, but the educational attainment of parents has been shown to affect the educational choices of their children. Exhibit 5, by presenting information on recent enrollment figures for high school youth, may indicate that minorities' educational attainment is increasing.

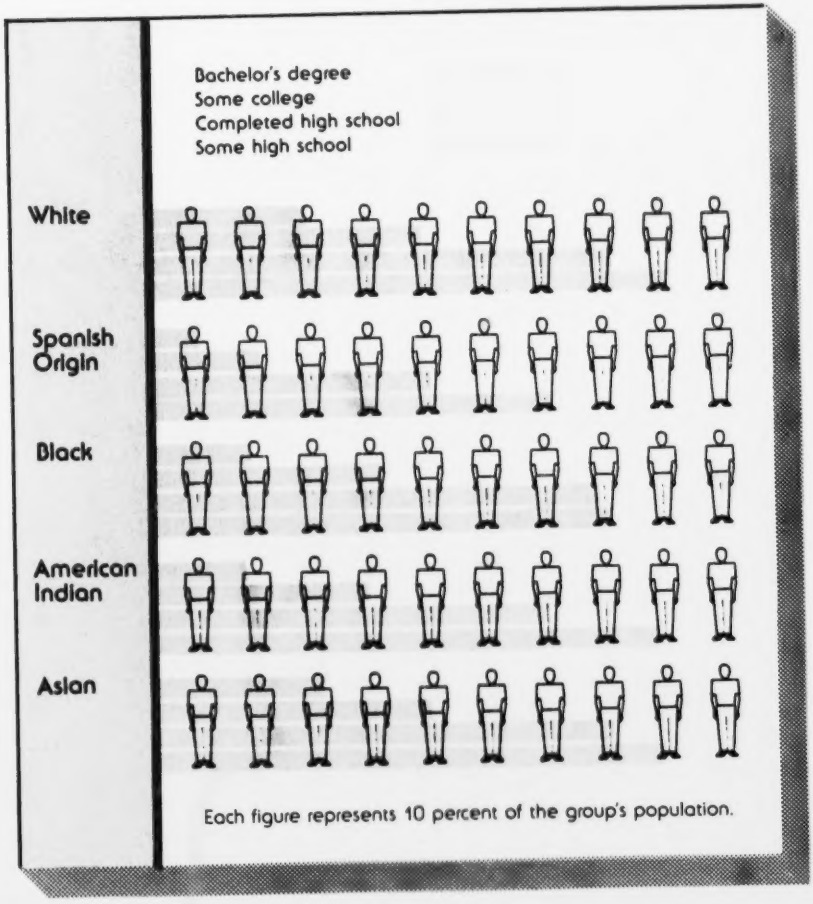
- In 1980, Colorado had the highest proportion in the nation (23 percent) of college graduates in its population aged 25 or older and the third highest percentage of high school graduates (78 percent) (American Demographics, 1982).

- Although 80 percent of the White population aged 25 or over had completed high school, less than one-half of the Spanish-origin population had attained that level. Of the Black and Asian populations, approximately three-quarters had graduated from high school, and nearly seven-tenths of the American Indian population completed high school.

- Approximately 45 percent of the White, 40 percent of the Black, and 46 percent of the Asian population had completed some college compared with less than 20 percent of the Spanish-origin population.

- The disparity in educational attainment is most striking at the bachelor's degree level or higher. For the White population, 24 percent had completed at least the baccalaureate degree, while 28 percent of the Asian population had attained that level. Among the Black population, nearly 14 percent had earned a bachelor's degree or more, while 12 percent of the American Indian category had completed at least a baccalaureate degree. The proportion of the Spanish-origin population holding at least a bachelor's degree was less than 7 percent.

Exhibit 4
Educational Attainment by Race and Spanish Origin of Persons Aged 25 and Over, 1980



Source: Kaufman et al., 1983, Table CO-4

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Exhibit 5
Persistence in High School of Colorado Ninth Graders, Fall 1979 to Fall 1982 (Public Schools Only)

Exhibit 5 presents the percentage of fall 1979 ninth graders in Colorado public schools who were enrolled as tenth graders in fall 1980, eleventh graders in fall 1981, and twelfth graders in fall 1982. While these figures are not identical to rates of persistence for the various racial and ethnic groups through the start of the twelfth grade, they may serve as an indicator or a relative measure of persistence. The numbers of American Indian and Asian students in Colorado are too small to imply persistence from the data. In-migration has caused the absolute numbers of Black students in the tenth and eleventh grade groups to increase. Data on graduation rates are not available.

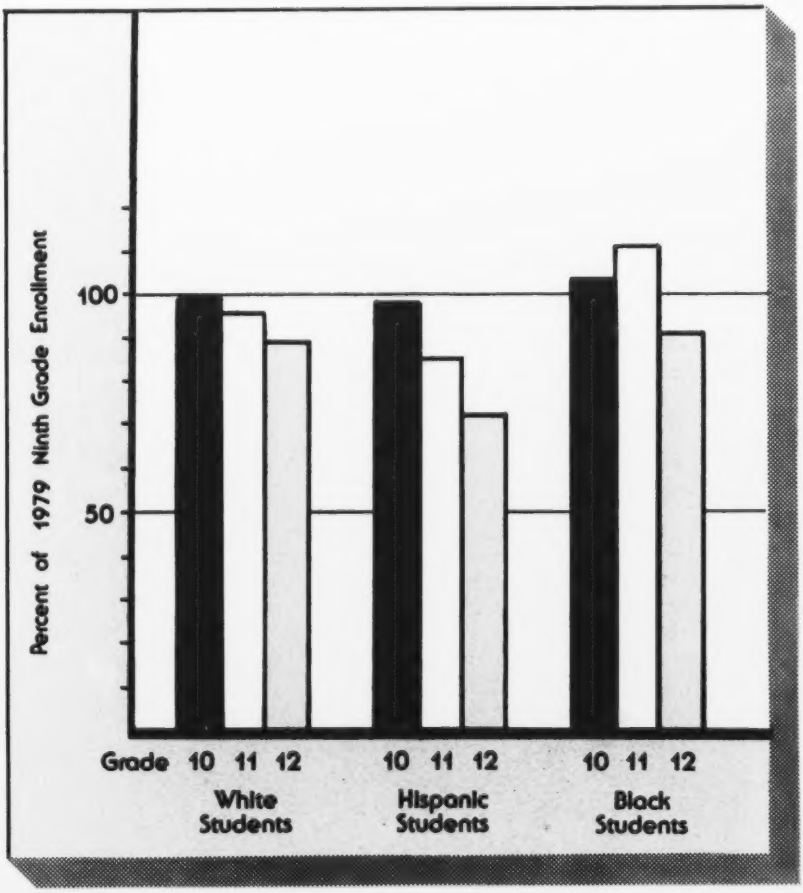
- This exhibit implies that Hispanics have higher dropout rates than Whites or Blacks and that these students appear to drop out earlier. While White eleventh graders equalled almost 96 percent of White ninth grade enrollments two years earlier, Hispanic eleventh graders totalled 86 percent of their cohort.

- The number of Hispanic high school seniors in 1982 comprised 72 percent of the number of ninth graders three years earlier as opposed to 91 percent for Blacks and 89 percent for Whites.

- Thus, it is clear that a sizeable part of Hispanic youth, relative to others, will not complete high school and be eligible to enter college.

- These figures appear to be similar to nationwide figures, which show the "leakage" of minorities from the "educational pipeline." Nationally, 83 percent of White students over the period from 1973 to 1979 completed high school compared with 72 percent of Black students and 55 percent of Hispanics (Astin, 1982).

Exhibit 5
Persistence in High School of Colorado Ninth Graders,
Fall 1979 to Fall 1982 (Public Schools Only)



Source: Western Interstate Commission for Higher Education, 1984

Note: Totals for Black tenth and eleventh grade students exceed 100 percent because of in-migration.

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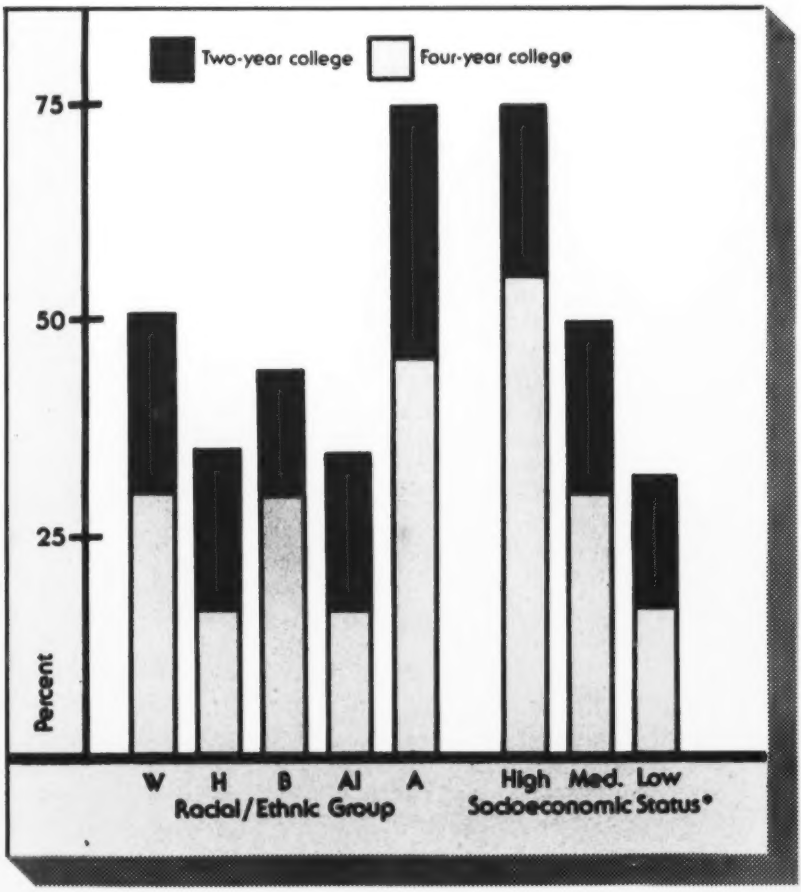
Exhibit 6
Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College

Taken together, Exhibits 6 and 7 illustrate the relationships among race and/or ethnicity, family income, and college attendance. State-by-state data on college enrollment rates are not available, but Exhibit 6 displays the results of a national survey relating to the percentage of 1980 high school graduates who enrolled in college during the next several years. It should be recognized that this was a national survey with limited generalization to the population of specific states. The survey did show that attendance patterns in the West were different from other regions. Although approximately the same percentage of western high school seniors attended college as seniors from other regions of the U.S., a greater percentage of students from the West attended two-year colleges than students from the other regions (28 percent in the West compared with 14 percent in the Northeast and 16 percent in the North Central states and the South).

- The five bars on the left of the exhibit show the college attendance patterns for the racial and Spanish-origin groups. White and Black students attended four-year institutions in approximately the same proportions, but a greater proportion of Whites than Blacks attended two-year institutions, which accounts for the greater overall college-going rate for Whites. Compared with the other groups, American Indian and Spanish-origin students attended two-year colleges in relatively large proportions and four-year colleges in low proportions. Attendance at both two-year and four-year institutions by students of Asian ancestry was far greater than for any other racial or origin group.

- Attendance patterns vary according to socioeconomic status (SES), which is measured by a composite of parental education, family income, father's occupation, and household characteristics. High SES students are more likely to attend postsecondary educational institutions at all levels than those with lower SES.

Exhibit 6
Percentage of 1980 U.S. High School Seniors Subsequently Enrolled in College



Source: National Center for Education Statistics, 1984

*Socioeconomic status is measured by a composite of parental education, family income, father's occupation, and household characteristics.

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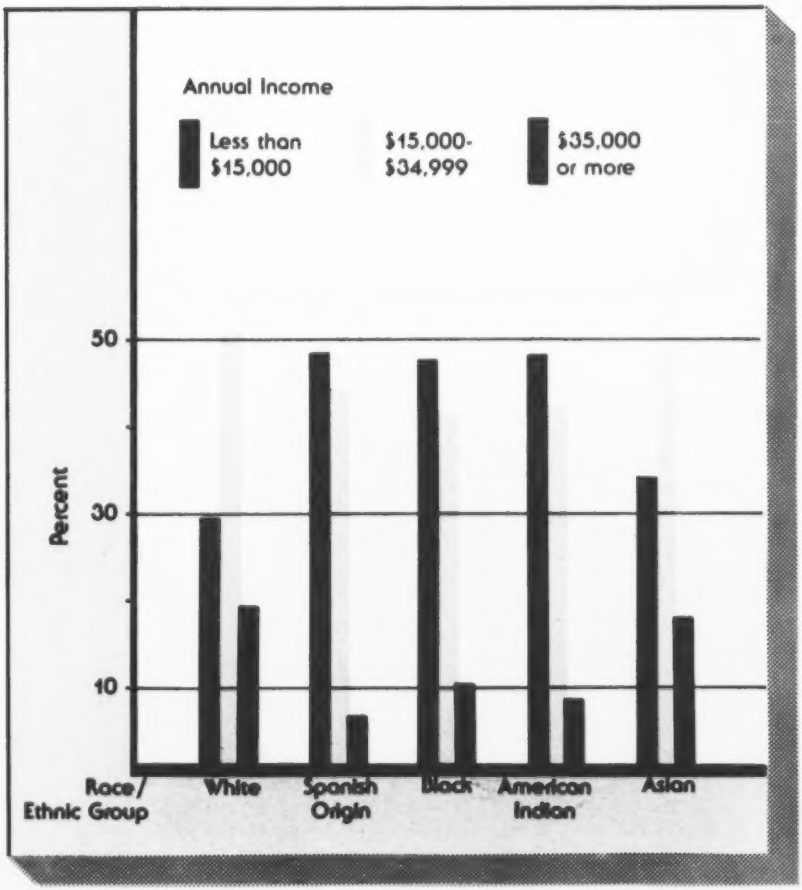
Exhibit 7
Colorado Family Income by Race and Spanish Origin, 1979

Exhibit 7 shows the percentages of the population with family incomes in three ranges: less than $15,000 per year; $15,000 to $34,999 per year; and $35,000 or more per year. The distribution for each racial or ethnic group is illustrated.

- Large proportions of the Black, Spanish-origin, and American Indian populations come from families earning under $15,000 per year, and small proportions of those groups come from families earning $35,000 or more.
- Family income levels for the White and Asian populations are similar: compared with the other racial or ethnic groups, relatively low percentages earn less than $15,000 and higher percentages earn more than $35,000.
- This exhibit illustrates the relatively low economic status of Blacks, American Indians, and people of Spanish origin in Colorado compared with Whites and Asians.
- These figures, when combined with the general information on student attendance patterns presented in Exhibit 6, demonstrate the important connection between economic status and education.

Exhibit 7
Colorado Family Income by Race and Spanish Origin, 1979



Source: Kaufman et al., 1983, Table CO-6

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Exhibits 8A-8E
Postsecondary Enrollment
Compared with Representation in the Population, 1980

Figures 8A-8E display the composition of postsecondary enrollments by race and ethnicity compared with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of one racial or ethnic group enrolled in each of the four levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented among postsecondary students in proportion to its representation in the population.

- The White proportion of enrollments at all levels of postsecondary education is greater than the White proportion of the college-age population in general. The White proportion of two-year college enrollment is only slightly greater than the White share of the college-age population, but White representation increases at the four-year, graduate, and first professional levels.

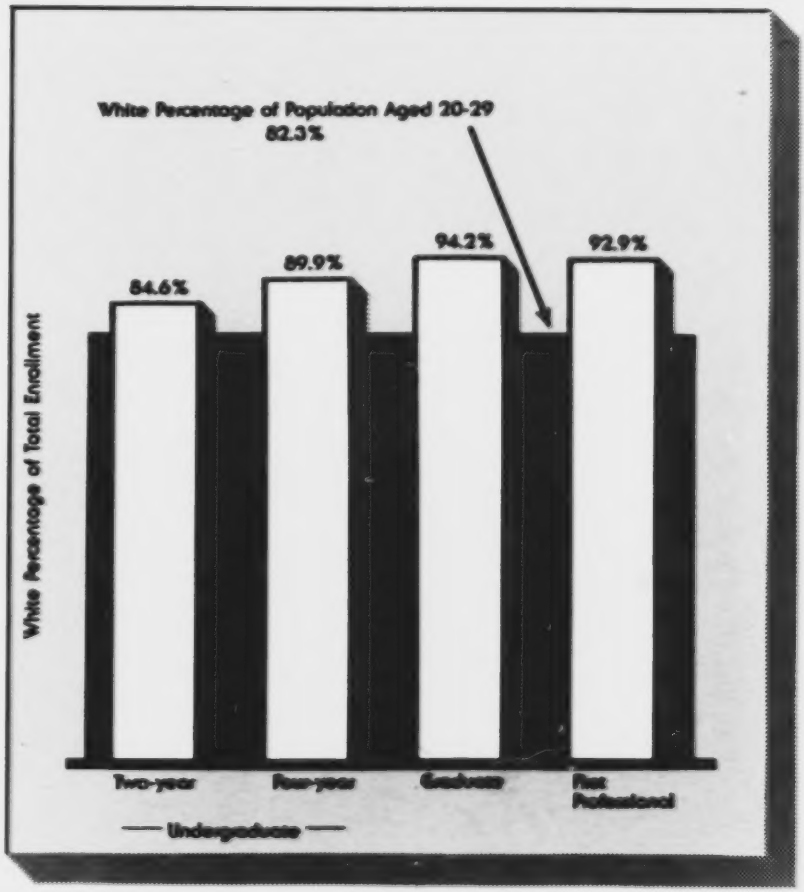
- Hispanics are underrepresented at all levels of postsecondary education, especially at the graduate level, where the proportion of Hispanic enrollment is one-quarter as large as the Spanish-origin proportion of the college-age population in Colorado.

- The Black proportion of two-year college enrollment is slightly greater than the proportion of Blacks in the population. Black representation decreases at the more advanced levels, so that the proportion of Black enrollment in graduate schools is approximately one-third the size of the group's proportion of the college-age population, and first professional Black enrollment is 41 percent of the group's proportion of the population.

- American Indians are well represented at the two-year and four-year levels, where they make up 1.2 percent and 0.7 percent respectively of the enrollments and 0.7 percent of the college-age population. They are underrepresented at the higher levels, however: the American Indian proportion of graduate enrollment is just over one-half of its proportion of the college-age population and nearly nine-tenths of its population proportion at the first professional level.

- Asians are well represented at all levels of higher education. At the two-year level the proportion of Asians enrolled is equal to their proportion of the college-age population. The Asian proportion of enrollments in four-year schools is one-third greater than the Asian proportion of the state's college-age population, and the Asian proportion of enrollments is 8 percent higher at the graduate and first professional degree levels.

Exhibit 8A
White Postsecondary Enrollments
Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 7 and 22

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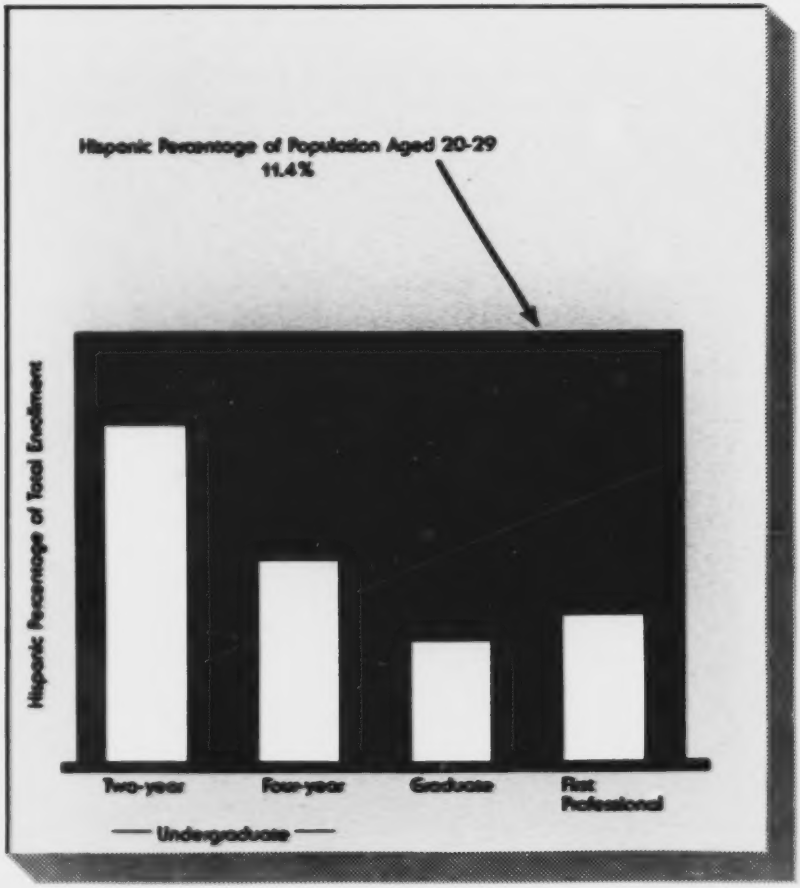
Exhibit 8B
Hispanic Postsecondary Enrollments
Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 7 and 22

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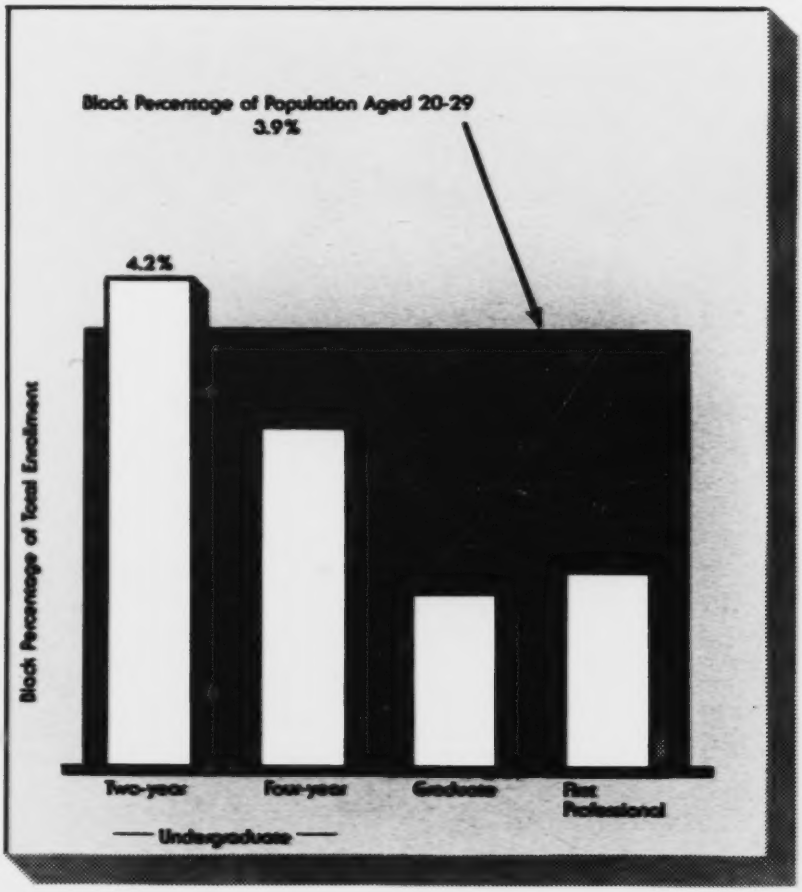
Exhibit 8C
Black Postsecondary Enrollments
Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 7 and 22

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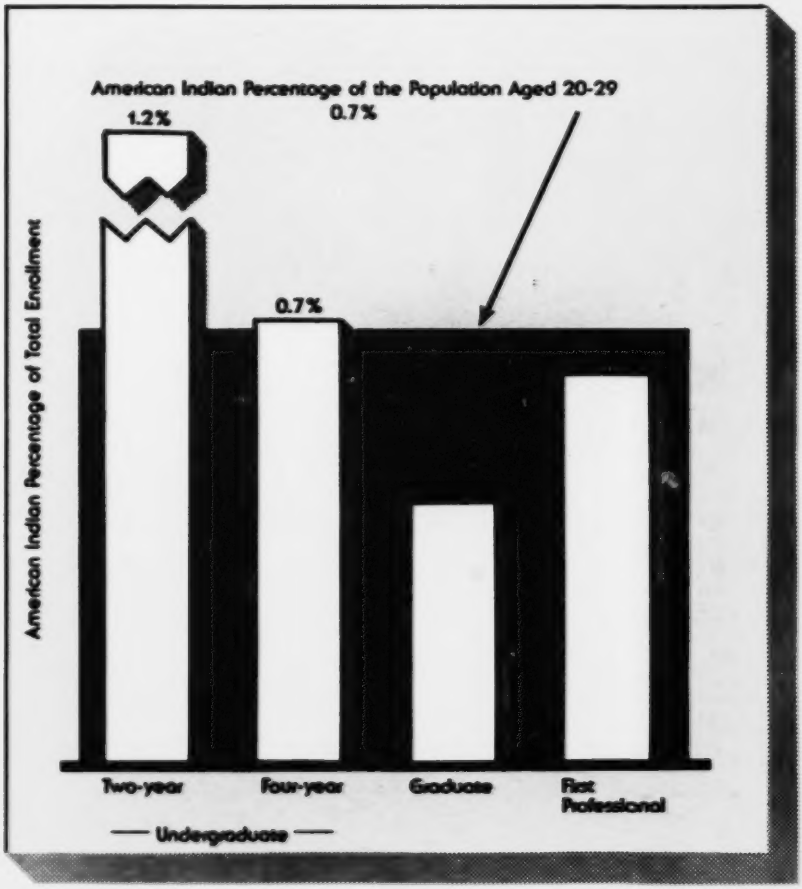
Exhibit 8D
American Indian Postsecondary Enrollments
Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 7 and 22

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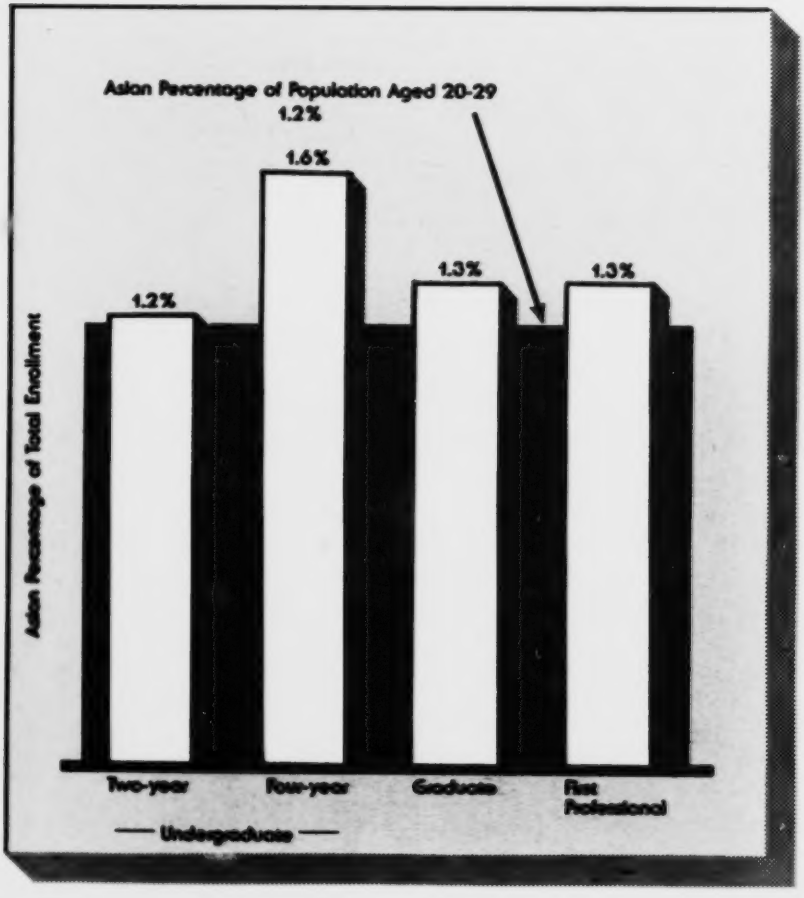
Exhibit 8E
Asian Postsecondary Enrollments
Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 7 and 20

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Exhibits 9A-9E
Earned Degrees
Compared with Representation in the Population, 1980-81

Figures 9A-9E display the distribution among racial and ethnic groups of earned degrees at five levels (associate, bachelor's, master's, doctoral, and first professional) with each group's representation in the college-age population (aged 20-29). Each exhibit uses bars to portray the proportion of earned degrees by one racial or ethnic group in each of the five levels of postsecondary education. The bars are superimposed upon a background field representing that group's proportion of the college-age population. Thus, the reader can determine whether a group is well represented in earned degrees in proportion to its representation in the population.

- In general, when the proportions of degrees awarded to members of minority groups are compared with the proportions of college-age population, the overall pattern of underrepresentation of minorities, especially at the baccalaureate and higher levels, is similar to that in enrollments.

- The White proportion of those earning degrees at all levels of postsecondary education is greater than the White proportion of the college-age population in general. The White proportion of two-year degrees is only slightly greater than the proportion of Whites in the college-age population, but the White proportion increases at the four-year, graduate, and first professional levels.

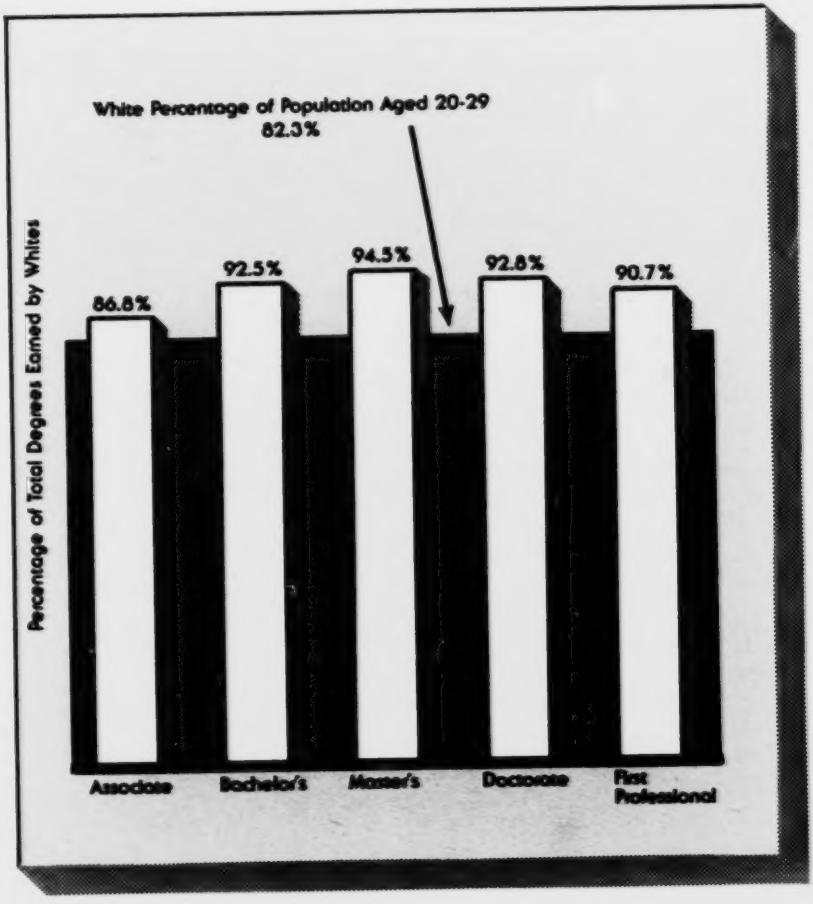
- Hispanics are underrepresented in earned degrees at all levels of postsecondary education. At the two-year degree level, the proportion of degrees earned by Hispanic students is slightly greater than one-half the size of the Spanish-origin proportion of the college-age population in the state. At the other degree levels, the proportions of degrees earned by Hispanic students is less than one-half as large as the Spanish-origin proportion of the college age-population.

- The Black proportion of two-year college degrees is slightly less than the proportion of Blacks in the population. Black representation decreases at the more advanced levels, so that the proportions of degrees earned by Black students are approximately one-half the size of the Black college-age population.

- American Indians are well represented at the two-year and first professional levels, but at the other degree levels, the proportions of degrees earned by American Indians are approximately one-half the size of the American Indian proportion of the college-age population in Colorado.

- Asians are well represented at the associate, bachelor's, and master's degree levels. The proportions of degrees earned by Asian students at the doctoral and first professional levels, however, are lower than the Asian proportion of the college-age population in Colorado.

Exhibit 9A
Degrees Earned by Whites
Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 12 and 22

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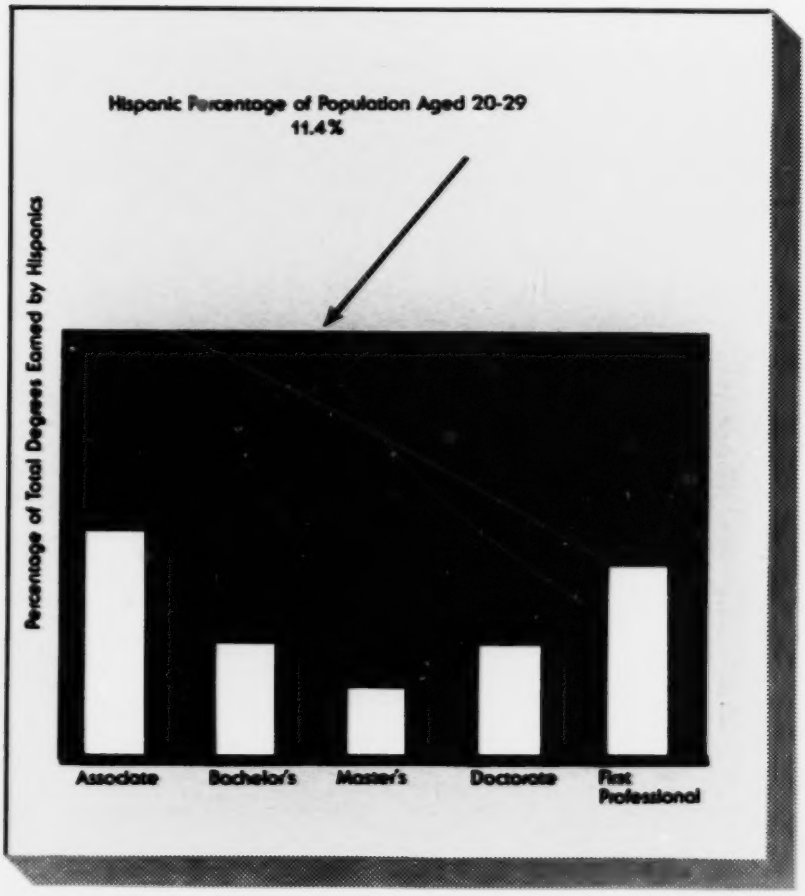
Exhibit 9B
Degrees Earned by Hispanics
Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 12 and 22

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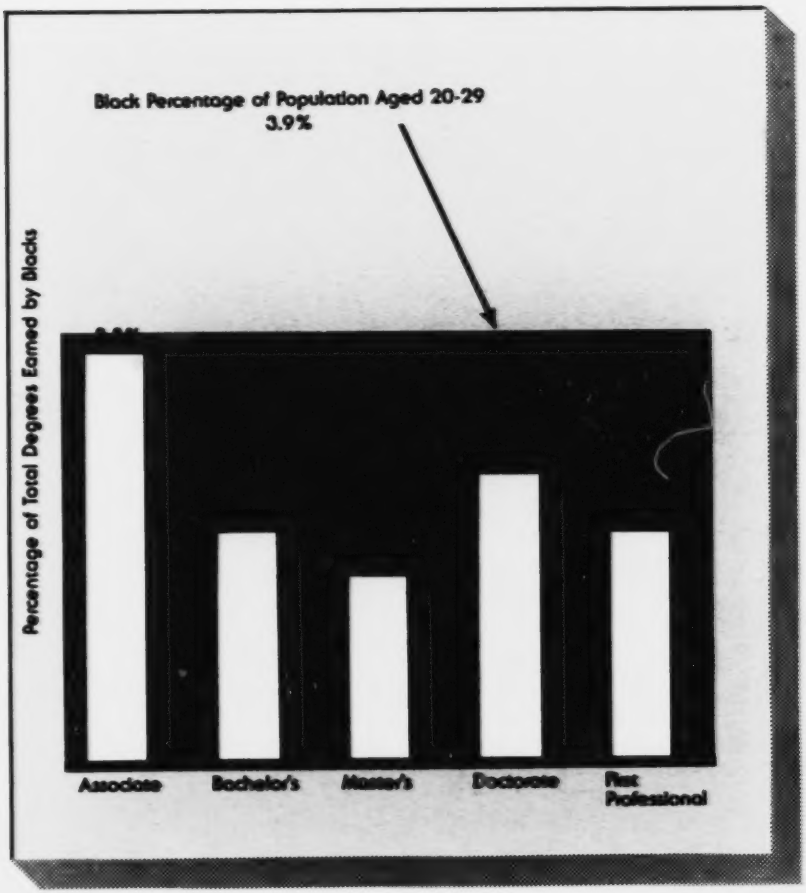
Exhibit 9C
Degrees Earned by Blacks
Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 12 and 22

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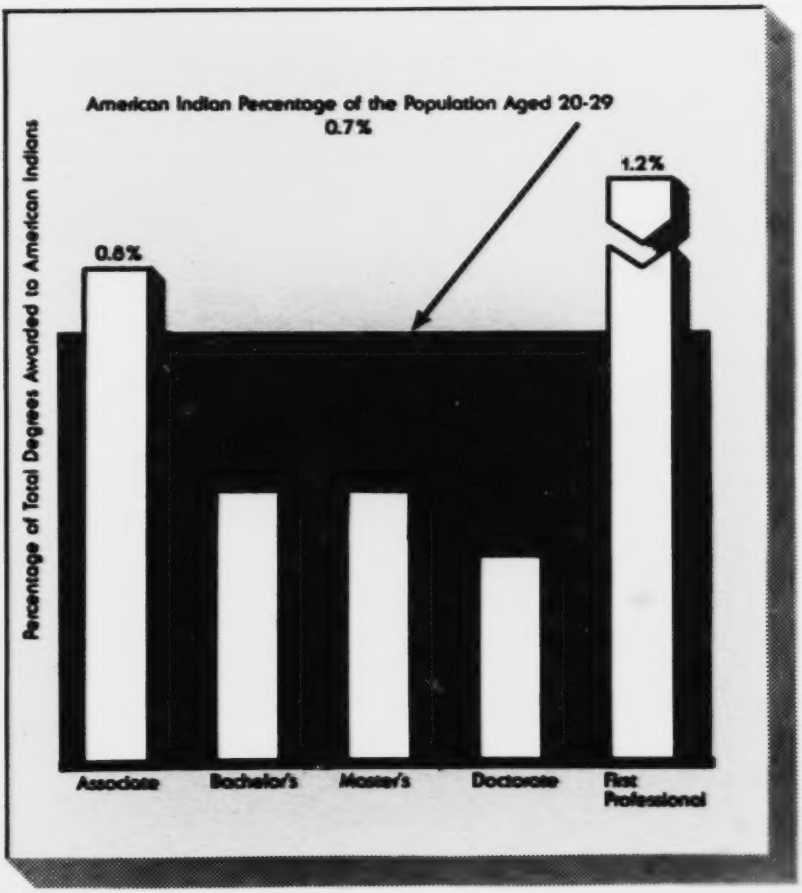
Exhibit 9D
Degrees Earned by American Indians
Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 12 and 22

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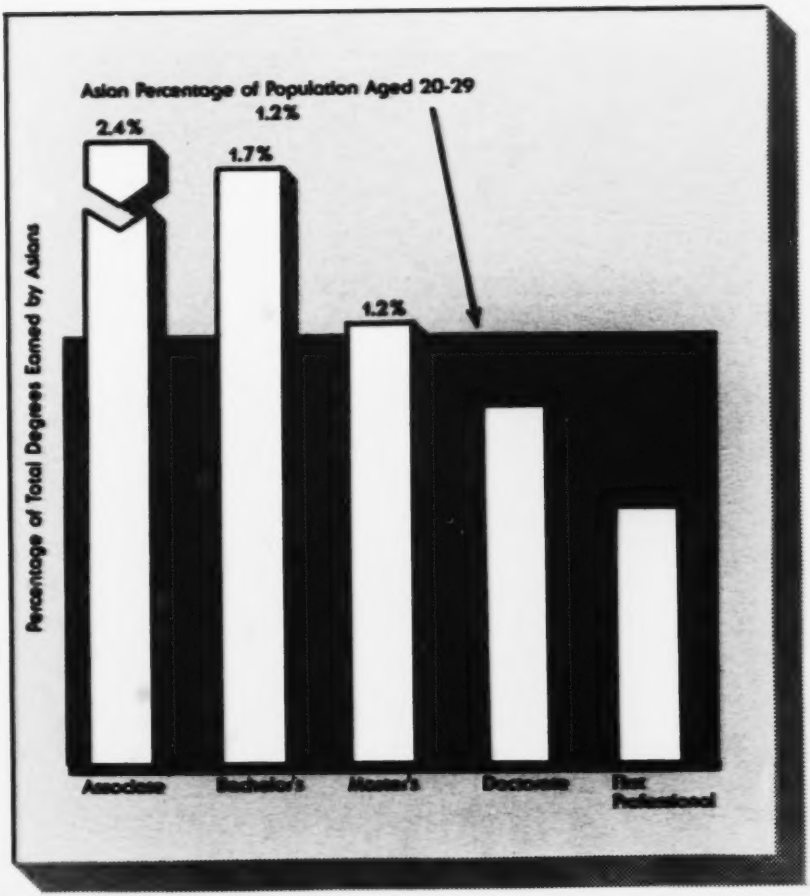
Exhibit 9E
Degrees Earned by Asians
Compared with Representation in the Population, 1980



Source: Kaufman et al., 1983, Tables 12 and 20

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Exhibit 10
Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

The following table presents the number of degrees awarded at five levels (associate, bachelor's, master's, doctoral, and first professional) by racial or ethnic group. At the doctoral and first professional levels, interpretation is difficult because such small numbers of degrees are awarded to minority students that year-to-year fluctuations appear as substantial percentage changes.

- Overall, except for an increase in first professional degrees of more than 17 percent and a decrease in master's degrees of more than 6 percent, there has been relatively little change in the numbers of degrees awarded in Colorado from the 1976-77 to the 1980-81 school years.

- Hispanic students have earned significantly fewer degrees at all levels except the first professional, at which level the number of degrees awarded more than doubled from 1976-77 to 1980-81.

- Black students earned more bachelor's, master's, and first professional degrees in 1980-81 than in 1976-77 but markedly fewer associate and doctoral degrees.

- The number of American Indian students earning degrees at all levels in Colorado is small, but they earned substantially more degrees in 1980-81 than in 1976-77 at all levels except the bachelor's, at which level they earned slightly fewer degrees.

- In 1980-81 Asian students earned substantially more associate, bachelor's and master's degrees than they did in 1976-77. But the group earned the same number of first professional degrees in 1980-81 as in 1976-77 and nearly 65 percent fewer doctorates.

Exhibit 10
Earned Degrees by Race and Spanish Origin, 1976-77 to 1980-81

	Degrees Awarded 1976-77	Degrees Awarded 1978-79	Percent Change 1976-78	Degrees Awarded 1980-81	Percent Change 1978-80	Percent Change 1976-80
State Totals						
Associate	4,338	4,652	7.2	4,355	-6.4	0.4
Bachelor's	14,208	13,864	-2.4	14,677	5.9	3.3
Master's	5,130	4,853	-5.4	4,811	-0.9	-6.2
Doctorate	703	655	-6.8	711	8.5	1.1
First Professional	716	722	0.8	839	16.2	17.2
White Students						
Associate	3,667	3,916	6.8	3,653	-6.7	-0.4
Bachelor's	12,973	12,625	-2.7	13,327	5.6	2.7
Master's	4,629	4,363	-5.7	4,218	-3.3	-8.9
Doctorate	539	540	0.2	557	3.1	3.3
First Professional	671	663	-1.2	758	14.3	13.0
Hispanic Students						
Associate	357	348	-2.5	258	-25.9	-27.7
Bachelor's	587	562	-4.3	457	-18.7	-22.1
Master's	178	122	-31.5	94	-23.0	-47.2
Doctorate	46	9	-80.4	19	111.1	-58.7
First Professional	21	30	42.9	44	46.7	109.5
Black Students						
Associate	204	215	5.4	160	-25.6	-21.6
Bachelor's	276	263	-4.7	313	19.0	13.4
Master's	68	72	5.9	79	9.7	16.2
Doctorate	25	9	-64.0	16	77.8	-36.0
First Professional	14	14	0.0	18	28.6	28.6
American Indian Students						
Associate	25	21	-16.0	34	61.9	36.0
Bachelor's	67	60	-10.4	65	8.3	-3.0
Master's	11	13	18.2	21	61.5	90.9
Doctorate	1	4	300.0	2	-50.0	100.0
First Professional	2	5	150.0	10	100.0	400.0
Asian Students						
Associate	56	62	10.7	103	66.1	83.9
Bachelor's	157	178	13.4	238	33.7	51.6
Master's	43	39	-9.3	53	35.9	23.3
Doctorate	17	8	-52.9	6	-25.0	-64.7
First Professional	6	9	50.0	6	-33.3	0.0

Source: Kaufman et al. 1983. Tables 12, 13, 14

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References

American Demographics. 1982. "1980 Census Demographics for States and Large Metropolitan Areas." 4(December):28-47.

American Demographics. 1983. "How They Rank." 5(December):30-43.

Astin, A. W. 1982. Minorities in American Higher Education. San Francisco: Jossey-Bass.

Kaufman, N.S; Dolman, G.; and Bowser, B.P. 1983. The Changing Demographics of the Southwest: Data and Issues Relating to Minority Representation in Postsecondary Education in Seven Southwest States. Boulder, CO: Western Interstate Commission for Higher Education.

Masnick, G., and Pitkin, J. 1982. The Changing Population of States and Regions: Analysis and Projections, 1970-2000. Cambridge, MA: Joint Center for Urban Studies for MIT and Harvard University.

McConnell, W. R., and Kaufman, N. S. 1984. High School Graduates: Projections for the Fifty States (1982-2000). Boulder, CO: Western Interstate Commission for Higher Education.

National Center for Education Statistics. 1984. "College Attendance After High School." Statistical Highlight (NCES 84-402). Washington, DC: National Center for Education Statistics.

Robey, B., and Russell, C. 1983. "Trends: The States in 1980." American Demographics 5(December):21-23,45.

U.S. Bureau of the Census. 1972. General Population Characteristics, series PC70-1-B for the United States, Arizona, California, Colorado, New Mexico, and Texas. Washington, DC: Government Printing Office.

U.S. Bureau of the Census. 1982. General Population Characteristics, series PC80-1-B for the United States, Arizona, California, Colorado, New Mexico, and Texas. Washington, DC: Government Printing Office.

Western Interstate Commission for Higher Education. 1984. The data upon which Exhibit 5 is based was gathered as background information for McConnell and Kaufman, 1984, cited above.